

COLOUR IMAGE SENSOR FOR SHORT-TIME EXPOSURE

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Abstract

The present invention concerns an optical sensor characterized by an image point unit arrangement, each unit of which includes an optoelectronic transformer for converting the incident radiation into photoelectrical current independent of the intensity and the wavelength, an integrating means for obtaining a measured value corresponding to the collected photoelectric current, a storage unit fitted with a control for storing the measured values, and a selector control for selecting the stored measured values. Based on the measured values related to the image point units, the image directed to the sensor by the incident radiation can be composed. In order to solve the problem about developing an optical sensor enabling the system to operate even with a short-time exposure, each image point unit comprises an integrating device (7, 8; 11, 12; 15, 16) and at least two storage units (21, 22, 23) arranged parallel to each other, so that during the measuring time at least two measured values, each allocated to different areas of the incident radiation spectrum, can be captured and stored, and retrieved together to form the colour information corresponding to the image point element.

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